Mr. Ron Terrell
Milestone Contractors, L.P.
P.O. Box 421459
Indianapolis, Indiana 46242-1459

Re: 145-14361-03230
5th Administrative Amendment to
FESOP 145-5759-03230

Dear Mr. Terrell:

Milestone Contractors, L.P., located at 201 East Rampart Street, Shelbyville, Indiana 46176 was issued a FESOP on December 11, 1996 for a stationary hot mix asphalt concrete source. A letter requesting changes to this permit was received on May 14, 2001. Pursuant to the provisions of 326 IAC 2-8-10 the permit is hereby administratively amended to incorporate the construction of the following:

(a) Replacement of the existing permitted maximum rated capacity 109 million British Thermal Units per hour (mmBtu/hr) aggregate dryer burner with a new maximum rated capacity 96 mmBtu/hr aggregate dryer burner.

The permit amendment consists of the following changes to incorporate the applicable requirements from a bigger burner dryer of 109 mmBtu/hr into a smaller burner dryer of 96.0 mmBtu/hr (changes are bolded and deletions are struck-through for emphasis):

SECTION D.1 FACILITY OPERATION CONDITIONS

(a)	one (1) aggregate drum mix dryer, identified as emission unit No. 2, with a maximum capacity of 350 tons per hour, equipped with one (1) natural gas fired aggregate dryer burner with a maximum rated capacity of ~~109~~ **96.0** million (MM) British thermal units (Btu) per hour using No. 2 distillate fuel oil and re-refined waste oil as back-up fuels and one (1) wet scrubber for air pollution control, exhausting at one (1) stack, identified as S-1; and
(b)	one (1) drag slat conveyor, three (3) feed conveyors, and one (1) screen.

Emissions Limitations and Standards [326 IAC 2-8-4(1)] [326 IAC 6-3] [326 IAC 12] [40 CFR Part 60.90]

D.1.1 No changes

D.1.2 No changes

D.1.3 No changes

D.1.4 Sulfur Dioxide (SO_2)
Pursuant to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations), sulfur dioxide emissions from the ~~109~~ **96.0** million Btu per hour burner for the aggregate dryer shall be limited to 1.6 pounds per million Btu heat input or a sulfur content of less than or equal to 1.31 percent when using re-refined waste oil. The source has accepted a sulfur content limit of 0.75 percent for re-refined

waste oil. When using No. 2 distillate fuel oil, the sulfur dioxide emissions from the ~~109~~ **96.0** million Btu per hour burner for the aggregate dryer shall be limited to 0.5 pound per million Btu heat input or a sulfur content of less than or equal to 0.49 percent.

Pursuant to 326 IAC 7-1.1-2, this sulfur dioxide limit applies at all times including periods of startup, shutdown, and malfunction.

D.1.5 Fuel Oil Usage

Pursuant to 326 IAC 2-8-4(1), the input of re-refined waste oil to the ~~109~~ **96.0** million Btu per hour burner for the aggregate dryer shall be limited, in total, to 1,667,846 U.S. gallons per 365 day period, rolled on a daily basis based on a maximum oil sulfur content of 0.75 percent. For purposes of determining compliance, ~~every million cubic feet of natural gas burned shall be equivalent to 5.4 gallons of re-refined waste oil based on SO_2 emissions and~~ every 1,000 gallons of No. 2 distillate fuel oil burned shall be equivalent to 626.0 gallons of re-refined waste oil based on SO_2 emissions and a maximum sulfur content of 0.49 percent such that the total gallons of re-refined waste oil and re-refined waste oil equivalent input does not exceed the limit specified. During the first 365 days of operation under this permit, the input of re-refined waste oil and re-refined waste oil equivalents shall be limited such that the total gallons divided by the accumulated days of operation shall not exceed 4,569 U.S. gallons per day. Therefore, the requirements of 326 IAC 2-7 will not apply.

*The following condition for the natural gas usage limit is not applicable for the 96 mmBtu/hr burner dryer, because PM10 and the other pollutants are **not** emitted at levels greater than 100 tons/year. Subsequent conditions will be renumbered accordingly.*

~~D.1.6 Natural Gas Usage~~

~~Pursuant to 326 IAC 2-8-4(1), the input of natural gas to the 109 million Btu per hour burner for the aggregate dryer shall be limited, in total, to 352.5 million cubic feet (MMCF) per 365 day period, rolled on a daily basis. For purposes of determining compliance, every 1,000 gallons of No. 2 distillate fuel oil burned shall be equivalent to 0.036 MMCF of natural gas based on NO_x emissions and 0.49 percent sulfur content of fuel and every 1,000 gallons of re-refined waste oil burned shall be equivalent to 0.035 MMCF of natural gas based on NO_x emissions and 0.75 percent sulfur content such that the total MMCF of natural gas and natural gas equivalents input does not exceed the limit specified. During the first 365 days of operation under this permit, the input of natural gas and natural gas equivalents shall be limited such that the total MMCF divided by the accumulated days of operation shall not exceed 0.96 MMCF per day. Therefore, the requirements of 326 IAC 2-7 will not apply.~~

Testing Requirements [326 IAC 2-8-4(3)]

D.1.~~7~~ **6** No changes.

D.1.~~8~~ **7** Sulfur Dioxide Emissions and Sulfur Content

The Permittee shall test for:

(a) Sulfur content of oil burned as fuel by the ~~109~~ **96.0** million Btu per hour burner for the aggregate dryer using 40 CFR Part 60, Appendix A, Method 19 for each load of oil delivered; or

~~(b) Sulfur dioxide emissions from the 109 million Btu per hour burner for the aggregate dryer using 40 CFR Part 60, Appendix A, Method 6 each time a test to comply with Condition D.1.6 is performed.~~

Sulfur content tests may be made by the oil supplier.

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.1.~~9~~ **8** through D.1.1~~6~~ **5** No changes in the conditions

~~D.1.17 Natural Gas Usage~~

~~(a) Complete and sufficient records shall be kept to establish compliance with the natural gas usage limit established in this permit and contain a minimum of the following:~~

~~(1) Calendar dates covered in the compliance determination period; and~~

~~(2) Monthly usage and calculated natural gas equivalent.~~

D.1.1 ~~8~~ **6**No changes

D.1.1~~9~~ **7** Quarterly Reporting
A quarterly summary to document compliance with operation condition numbers D.1.4, and D.1.5, ~~and D.1.6~~ shall be submitted, to the address listed in Section C.16 - General Reporting Requirements, using the enclosed forms or their equivalent, within thirty (30) days after the end of the quarter being reported.

The quarterly report form on page 34 of 35 for the natural gas usage limit was removed from the FESOP because the new 96 burner dryer's usage for natural gas is not limited.

The quarterly report form for the re-refined waste oil and fuel oil equivalent usage, has been revised to be consistent with condition changes.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION

FESOP Quarterly Report

Source Name: Milestone Contractors, L.P.
Source Address: 201 East Rampart Street, Shelbyville, Indiana 46176
FESOP No.: F145-5759-03230
5th Administrative Amendment No.: 145-14361-03230
Facility: ~~106~~ **96** million Btu per hour burner for the aggregate dryer
Parameter: sulfur dioxide (SO_2) content and fuel usage limitation
Limits:

sulfur content of No. 2 distillate fuel not to exceed 0.49%; sulfur content of re-refined waste oil not to exceed 0.75%; and 1,667,846 gallons of re-refined waste oil and re-refined waste oil equivalent per last 365 day period. For purposes of determining compliance, ~~every million cubic feet of natural gas burned shall be equivalent to 5.4 gallons of re-refined waste oil based on SO_2 emissions and~~ every 1,000 gallons of No. 2 distillate fuel oil burned shall be equivalent to 626.0 gallons of re-refined waste oil based on SO_2 emissions and a maximum sulfur content of 0.49 percent such that the total gallons of re-refined waste oil and re-refined waste oil equivalent input does not exceed the limit specified. During the first 365 days of operation under this permit, the input of re-refined waste oil and re-refined waste oil equivalents shall be limited such that the total gallons divided by the accumulated days of operation shall not exceed 4,569 U.S. gallons per day

Month: _____ **Year:** _____

Day	Fuel Type	Sulfur Content of Fuel Oils (%)	Heat Content of Fuel Oils (Btu/gal)	Re-refined W.O. and equivalent Fuel usage (gal/day)	Re-refined W.O. and equivalent Fuel usage last 365 days (gallons)	Day	Fuel Type	Sulfur Content of Fuel Oils (%)	Heat Content of Fuel Oils (Btu/gal)	Re-refined W.O. and equivalent Fuel usage (gal/day)	Re-refined W.O. and equivalent Fuel usage las 365 days (gallons)
1						17					
2						18					
3						19					
4						20					
5						21					
6						22					
7						23					
8						24					
9						25					
10						26					
11						27					
12						28					
13						29					
14						30					
15						31					
16											

9 No deviation occurred in this month.
9 Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____
Title/Position: _____
Signature: _____
Date: _____

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this amendment and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Aida De Guzman, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call at (800) 451-6027, press 0 and ask for Aida De Guzman or extension (3-4972), or dial (317) 233-4972.

Sincerely,
Original signed by

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments
APD

cc: File - Shelby County
U.S. EPA, Region V
Shelby County Health Department
Air Compliance Section Inspector - D J Knotts
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
Office of Air Quality

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
Phone: 1-800-451-6027

Milestone Contractors, L.P.
201 East Rampart Street
Shelbyville, Indiana 46176

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the facilities listed in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 and contains the conditions and provisions specified in 326 IAC 2-8 and 40 CFR Part 70.6 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments) and IC 13-15 and IC 13-17 (prior to July 1, 1996, IC 13-1-1-4 and IC 13-7-10).

Operation Permit No.: F145-5759-03230	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date: December 11, 1996
First Administrative Amendment: 145-8417, issued on April 18, 1997 First Minor Permit Modification: 145-8840, issued on October 27, 1997 Second Administrative Amendment:: 145-9906, issued on December 1, 1998 Third Administrative Amendment:: 145-8417, issued on January 14, 1999 Fourth Administrative Amendment: 145-10498, issued on April 23, 1999	
Fifth Administrative Amendment: 145-14361	Affected Pages: 4, 23, 24, 25, 26, 27, 33, 34
Issued by: Original signed Janet McCabe Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: July 5, 2001

SECTION A SOURCE SUMMARY

A.1 General Information

The Permittee owns and operates a hot mix asphalt concrete source.

Responsible Official:	Ron Terrell, Senior Manager Asphalt Plants
Source Address:	201 East Rampart Street, Shelbyville, Indiana 46176
Mailing Address:	P.O. Box 421459, Indianapolis, Indiana 46242-1459
SIC Code:	2951
County Location:	Shelby
County Status:	Attainment for all criteria pollutants
Source Status:	Synthetic Minor Source, FESOP Program

A.2 Emission Units and Pollution Control Summary

The stationary source consists of the following emission units and pollution control devices:

(a) one (1) aggregate drum mix dryer, identified as emission unit No. 2, with a maximum capacity of 350 tons per hour, equipped with one (1) natural gas fired aggregate dryer burner with a maximum rated capacity of 96.0 million (MM) British thermal units (Btu) per hour using No. 2 distillate fuel oil and re-refined waste oil as back-up fuels and one (1) wet scrubber for air pollution control, exhausting at one (1) stack, identified as S-1;
(b) one (1) drag slat conveyor, three (3) feed conveyors, and one (1) screen;
(c) one (1) liquid asphalt storage tank, identified as Tank 10, with a maximum storage capacity of 30,000 gallons, exhausting at one (1) stack, identified as V-3; and
(d) cold-mix (stockpile mix) asphalt storage piles.

Note: The capacity of this asphalt plant is being upgraded from 200 tons per hour to its full rated capacity of 350 tons per hour.

A.3 Insignificant Activities

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(20):

(a) one (1) No. 2 distillate fuel oil fired asphalt storage tank heater, identified as emission unit No. 11, rated at 0.45 MMBtu per hour using natural gas as back-up fuel, and exhausting at two (2) stacks, identified as S-2A, and S-2B;
(b) one (1) natural gas fired hot oil heater, identified as emission unit No. 13, rated at 1.25 MMBtu per hour using No. 2 distillate fuel oil as back-up fuel, exhausting at one (1) stack, identified as S-4;
(c) one (1) cold feed system consisting of four (4) compartments with a total aggregate holding capacity of 100 tons;
(d) two (2) hot mix asphalt cement storage silos, each with a maximum storage capacity of 100 tons;
(e) one (1) Recycled Asphalt Pavement (RAP) feed bin with a holding capacity of 18 tons;
(f) one (1) liquid asphalt storage tank, identified as Tank 12, with a maximum storage capacity of 22,000 gallons, exhausting at one (1) stack, identified as V-5;

SECTION D.1 FACILITY OPERATION CONDITIONS

(a)	one (1) aggregate drum mix dryer, identified as emission unit No. 2, with a maximum capacity of 350 tons per hour, equipped with one (1) natural gas fired aggregate dryer burner with a maximum rated capacity of 96.0 million (MM) British thermal units (Btu) per hour using No. 2 distillate fuel oil and re-refined waste oil as back-up fuels and one (1) wet scrubber for air pollution control, exhausting at one (1) stack, identified as S-1; and
(b)	one (1) drag slat conveyor, three (3) feed conveyors, and one (1) screen.

Emissions Limitations and Standards [326 IAC 2-8-4(1)] [326 IAC 6-3] [326 IAC 12] [40 CFR Part 60.90]

D.1.1 Particulate Matter

State: Pursuant to 326 IAC 6-3 (Process Operations), 326 IAC 2-2 and 40 CFR Part 52.21 (Prevention of Significant Deterioration), the particulate matter emissions from the mixing and drying operation shall not exceed 40.7 pounds per hour.

Federal: Pursuant to 326 IAC 12, (40 CFR Part 60.90, Subpart I) "Standards of Performance for Hot Mix Asphalt Facilities", the particulate matter emissions from the mixing and drying operations shall be limited to 0.04 grains per dry standard cubic foot (gr/dscf).

D.1.2 Particulate Matter 10 Microns (PM-10)

Pursuant to 326 IAC 2-8-4, particulate matter 10 microns emissions from the aggregate mixing and drying operation shall not exceed 16.9 pounds per hour, including both filterable and condensible fractions. Compliance with this limit will satisfy 326 IAC 2-8-4. Therefore, the Part 70 rules (326 IAC 2-7) do not apply.

D.1.3 Opacity

Pursuant to 326 IAC 12, (40 CFR Part 60.92, Subpart I) "Standards of Performance for Hot Mix Asphalt Facilities", the mixing and drying operations shall not discharge or cause the discharge into the atmosphere any gases which exhibit 20 percent opacity or greater.

D.1.4 Sulfur Dioxide (SO_2)

Pursuant to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations), sulfur dioxide emissions from the 96.0 million Btu per hour burner for the aggregate dryer shall be limited to 1.6 pounds per million Btu heat input or a sulfur content of less than or equal to 1.31 percent when using re-refined waste oil. The source has accepted a sulfur content limit of 0.75 percent for re-refined waste oil. When using No. 2 distillate fuel oil, the sulfur dioxide emissions from the 96.0 million Btu per hour burner for the aggregate dryer shall be limited to 0.5 pound per million Btu heat input or a sulfur content of less than or equal to 0.49 percent.

Pursuant to 326 IAC 7-1.1-2, this sulfur dioxide limit applies at all times including periods of startup, shutdown, and malfunction.

D.1.5 Fuel Oil Usage

Pursuant to 326 IAC 2-8-4(1), the input of re-refined waste oil to the 96.0 million Btu per hour burner for the aggregate dryer shall be limited, in total, to 1,667,846 U.S. gallons per 365 day period, rolled on a daily basis based on a maximum oil sulfur content of 0.75 percent. For purposes of determining compliance, every 1,000 gallons of No. 2 distillate fuel oil burned shall be equivalent to 626.0 gallons of re-refined waste oil based on SO_2 emissions and a maximum sulfur content of 0.49 percent such that the total gallons of re-refined waste oil and re-refined waste oil equivalent input does not exceed the limit specified. During the first 365 days of operation under this permit, the input of re-refined waste oil and re-refined waste oil equivalents shall be limited such that the total gallons divided by the accumulated days of operation shall not exceed 4,569 U.S. gallons per day. Therefore, the requirements of 326 IAC 2-7 will not apply.

Testing Requirements [326 IAC 2-8-4(3)]

D.1.6 Particulate Matter

During the period between 30 and 36 months after issuance of this permit, the Permittee shall perform PM and PM-10 testing utilizing methods per 40 CFR Part 60 Appendix A, Method 5, 17, 40 CFR Part 51 Appendix M, Method 201, 201a, 202, as approved by the Commissioner. This test shall be repeated at least once every five years from the date of this valid compliance demonstration. PM-10 includes filterable and condensible PM-10.

D.1.7 Sulfur Dioxide Emissions and Sulfur Content

The Permittee shall test for:

(a) Sulfur content of oil burned as fuel by the 96.0 million Btu per hour burner for the aggregate dryer using 40 CFR Part 60, Appendix A, Method 19 for each load of oil delivered.

Sulfur content tests may be made by the oil supplier.

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.1.8 Daily Visible Emission Notations

Daily visible emission notations of the conveyors, transfer points, aggregate storage piles, unpaved roads, and the mixing and drying operation stack exhaust, shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, 80 percent of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

D.1.9 Pressure and Water Flow Rate Readings

The Permittee shall take pressure and scrubbing liquid (water) flow rate readings from the centrifugal scrubber controlling the mixing and drying operation, at least once a day when the mixing and drying process is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the centrifugal scrubber shall be maintained within the range of 10 and 20 inches of water and the flow rate for scrubbing liquid shall be maintained within the range of 150 and 300 gallons of water per minute. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when the pressure reading or flow rate is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with condition C.11 - Pressure Gauge Specifications, be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.10 Preventive Maintenance [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with condition B.13 of this permit, is required for this source.

D.1.11 Preventive Inspections

The following inspections shall be performed when the mixing and drying operation is operating in accordance with the Preventive Maintenance Plan prepared pursuant to condition B.13:

Daily (during operating season):

(a) Check pipes and manifolds for leaks and plugging;
(b) Check valves for position, operation, leaks, and wear;
(c) Check pump for leaking at gland, increased noise, and wear; and
(d) Check pressure gauge and ammeter for changes in either or both from clean system readings.

Monthly (during operating season):

(a) Check body for leakage, material feed buildup, abrasion, and corrosion;
(b) Check if spray bars are broken, and check for plugged nozzles and worn or missing nozzles; and

(c) Check pressure gauge for accuracy.

Appropriate corrective actions shall be taken in accordance with condition C.12.

D.1.12 Scrubber Failure Detection
In the event that scrubber failure has been observed:

(a) The asphalt mixing and aggregate drying operation shall be shut down immediately until the units have been repaired.

(b) Based upon the findings of the inspection, any additional corrective actions shall be devised within eight (8) hours of discovery and shall include a timetable for completion.

D.1.13 Fuel Oil Sampling and Analysis
Oil samples shall be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted. The Permittee shall analyze the oil sample to determine the sulfur content of the oil in accordance with 326 IAC 3-3-4. If a partially empty fuel tank is refilled, a new sample and analysis is required upon filling. Vendor analysis of each load delivered is acceptable, in lieu of the above, if accompanied by a certification.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.1.14 Operational Parameters
The Permittee shall maintain a daily record for the wet scrubber controlling particulate matter emissions from asphalt mixing and aggregate drying operations of the following values:

(a) Inlet and outlet differential static pressure;

(b) scrubbing liquid (water) flow rate;

(c) Visible observations;

(d) Checklist with dates and initials for each preventive action performed; and

(e) Records of corrective actions.

D.1.15 Re-refined Waste Oil Usage

(a) Complete and sufficient records shall be kept to establish compliance with the re-refined waste oil usage limits and sulfur dioxide emission limit established in this permit and contain a minimum of the following:

(1) Calendar dates covered in the compliance determination period; and

(2) Daily usage, calculated re-refined waste oil equivalents, and sulfur content in fuel oil.

(3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; and

(4) Fuel supplier certifications.

(b) The supplier certification shall contain, as a minimum, the following:

(1) The name of the oil supplier; and

(2) A statement from the oil supplier that certifies the sulfur content and heat content of the fuel oil.

D.1.16 Re-refined Waste Oil Usage

Pursuant to 329 IAC 3.1-11 (Standards for the management of specific hazardous wastes and specific types of hazardous waste management facilities), the re-refined waste oil burned in the aggregate dryer burner shall meet the used oil specifications in 40 CFR 266.40 (e). Therefore, 40 CFR 266 (Standards for the management of specific hazardous wastes and specific types of hazardous waste management facilities), Subpart E (used oil burned for energy recovery), does not apply.

D.1.17 Quarterly Reporting

A quarterly summary to document compliance with operation condition numbers D.1.4, and D.1.5, shall be submitted, to the address listed in Section C.16 - General Reporting Requirements, using the enclosed forms or their equivalent, within thirty (30) days after the end of the quarter being reported.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
Office of Air Quality
COMPLIANCE DATA SECTION

FESOP Quarterly Report

Source Name: Milestone Contractors, L.P.
Source Address: 201 East Rampart Street, Shelbyville, Indiana 46176
FESOP No.: F145-5759-03230
5th Administrative Amendment: 145-14361-03230
Facility: 96.0 million Btu per hour burner for the aggregate dryer
Parameter: sulfur dioxide (SO_2) content and fuel usage limitation
Limits:

sulfur content of No. 2 distillate fuel not to exceed 0.49%; sulfur content of re-refined waste oil not to exceed 0.75%; and 1,667,846 gallons of re-refined waste oil and re-refined waste oil equivalent per last 365 day period. For purposes of determining compliance, every 1,000 gallons of No. 2 distillate fuel oil burned shall be equivalent to 626.0 gallons of re-refined waste oil based on SO_2 emissions and a maximum sulfur content of 0.49 percent such that the total gallons of re-refined waste oil and re-refined waste oil equivalent input does not exceed the limit specified. During the first 365 days of operation under this permit, the input of re-refined waste oil and re-refined waste oil equivalents shall be limited such that the total gallons divided by the accumulated days of operation shall not exceed 4,569 U.S. gallons per day

Month: _____ **Year:** _____

Day	Fuel Type	Sulfur Content of Fuel Oils (%)	Heat Content of Fuel Oils (Btu/gal)	Re-refined W.O. and equivalent Fuel usage (gal/day)	Re-refined W.O. and equivalent Fuel usage last 365 days (gallons)	Day	Fuel Type	Sulfur Content of Fuel Oils (%)	Heat Content of Fuel Oils (Btu/gal)	Re-refined W.O. and equivalent Fuel usage (gal/day)	Re-refined W.O. and equivalent Fuel usage las 365 days (gallons)
1						17					
2						18					
3						19					
4						20					
5						21					
6						22					
7						23					
8						24					
9						25					
10						26					
11						27					
12						28					
13						29					
14						30					
15						31					
16											

9 No deviation occurred in this month.
9 Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____
Title/Position: _____
Signature: _____
Date: _____

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Indiana Department of Environmental Management
Office of Air Management

Technical Support Document (TSD) for an Administrative Amendment to a Federally Enforceable State Operating Permit (FESOP)

Source Background and Description

Source Name:	Milestone Contractors, L.P.	
Source Location:	201 East Rampart Street, Shelbyville, Indiana 46176	
County:	Shelby	
SIC Code:	2951	
Operation Permit No.:	F 145-5759-03230	Issuance Date: December 11, 1996
Administrative Amendment:	145-14361-03230	
Permit Reviewer:	Aida De Guzman	

The Office of Air Management (OAM) has reviewed a revision application from Milestone Contractors, L.P., relating to the following changes to the process equipment at the hot mix asphalt concrete source:

(a) Replacement of the existing permitted maximum rated capacity 109 million British Thermal Units per hour (mmBtu/hr) aggregate dryer burner with a new maximum rated capacity 96.0 mmBtu/hr aggregate dryer burner.

Existing Approvals

The source was issued a Federally Enforceable State Operating Permit (F 145-5759-03230 on December 11, 1999. The source has since received the following:

(a) First Administrative Amendment No.: 145-8417, issued on April 18, 1997;

(b) First Minor Permit Revision No.: 145-8840, issued on October 27, 1997

(c) Second Administrative Amendment No.: 145-9906, issued on December 1, 1998;

(d) Third Administrative Amendment No.: 145-10484, issued on January 14, 1999; and

(e) Fourth Administrative Amendment No.: 145-10498, issued on April 23, 1999.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the Administrative Amendment be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on May 14, 2001.

Emission Calculations

While the change in size of the aggregate dryer burner will not affect the limited PTE of the source, the applicable emission factors used to determine the limited fuel consumption amounts associated with that limited PTE will change. See Appendix A of this document for detailed calculations including the revised fuel usage limitations for the new dryer burner (3 pages).

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

There will be no increase in potential to emit (PTE) due to the replacement aggregate dryer burner, which is smaller than the existing burner. The existing limited PTE of the source will stay the same.

Justification for Revision

The Federally Enforceable State Operating Permit (FESOP) is being modified through an Administrative Amendment. This amendment is being performed pursuant to 326 IAC 2-8-10(13), "which incorporates a modification of an existing source if the modification will replace or repair a part or piece of equipment in an existing process which does not result in increase of the actual emissions".

County Attainment Status

The source is located in Shelby County.

Pollutant	Status
PM-10	attainment
SO_2	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC and NO_X emissions are considered when evaluating the rule applicability relating to the ozone standards. Shelby County has been designated as attainment or unclassifiable for ozone.

(b) Shelby County has been classified as attainment or unclassifiable for all other regulated air pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(c) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 but has an applicable New Source Performance Standard that was in effect on August 7, 1980, the fugitive PM emissions are counted toward determination of PSD and Emission Offset applicability.

Source Status

Existing Source PSD Definition (emissions after controls and limited emissions):
Below table reflects the limits in the issued FESOP F145-5759-03230:

Pollutant	Emissions (ton/yr)
PM	120.19
PM10	36.57
SO_2	99.0
VOC	99.0
CO	7.56
NO_x	99.0
HAPs	9.48

(a) This existing source is **not** a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD

Potential to Emit of Modification After Issuance

The table below summarizes the **aggregate dryer burner revised** potential to emit, reflecting all limits, due to replacement of the existing 109 mmBtu/hr with 96 mmBtu/hr. The source has accepted a federally enforceable limit for sulfur dioxide (SO_2) and volatile organic compounds (VOC) of less than 100 tons per year.

	Limited PTE (tons/year)						
Process/facility	PM	PM-10	SO2	VOC	CO	NOx	HAPs
New 96 mmBtu/hr Aggregate Dryer Burner	51.34	42.68	92.19	3.14	39.49	57.89	neg.
Total Emissions	51.34	42.68	92.19	3.14	39.49	57.89	neg.

(a) This modification to an existing minor stationary source is not major because each pollutant emissions increase is less than the PSD significant levels of 250 tons per year. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Federal Rule Applicability

There is no change in the applicable Federal rules for this facility as a result of the changes to the aggregate dryer, mixer and burner changes:

(a) The hot mix asphalt source is still subject to the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.90 through 60.93, Subpart I) "Standards of Performance for Hot Mix Asphalt Facilities". This rule limits particulate matter emissions to 0.04 grains per dry standard cubic foot (gr/dscf) and also limits visible emissions to 20% opacity. The source will comply with this rule by using a bag type dust collection system to limit particulate matter emissions to 0.04 gr/dscf.

The new replacement 96.0 mmBtu/hr aggregate dryer burner will not trigger a new compliance testing as required under the NSPS, 326 IAC 12, (40 CFR Part 60.90 through 60.93, Subpart I) because of the following reasons:

(1) The dryer burner is **not a modification** to an existing facility because it does not increase the amount of air pollutant emitted into the atmosphere nor results in the emissions of any air pollutant into the atmosphere not previously emitted.

(2) The dryer burner is **not a reconstruction** to an existing facility because its fixed capital cost does **not exceed** 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility.

Since the testing requirement is not triggered then the testing stays on the same schedule as established in the issued FESOP.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR art 63) applicable to this source.

State Rule Applicability

There is no change to the applicable State rules as a result of the changes to the aggregate dryer burner. The following applicable rule analyses have been revised to reflect the new equipment:

(a) 326 IAC 6-3 (Process Operations)
The aggregate drying operation is subject to 326 IAC 6-3-2 (Particulate Emission Limitations). Pursuant to this rule, particulate matter emissions shall not exceed 64.8 pounds per hour. However, this PM emission rate would exceed the 326 IAC 2-2 (Prevention of Significant Deterioration) allowable PM emission rate of 250 tons per year, therefore, pursuant to 326 IAC 2-2, the allowable PM emission rate was truncated to 40.7 pounds per hour. The source will comply with the requirements under 326 IAC 6-3-2 by utilizing a baghouse for controlling particulate matter emissions to 11.3 pounds per hour.

(b) 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)
The sulfur dioxide emissions from the 96.0 MMBtu/hr dryer shall be limited to 0.5 lb/MMBtu heat input. This equates to a fuel oil sulfur content limit of 0.49%. Therefore, the sulfur content of the fuel must be less than or equal to 0.49% in order to comply with this rule (See Appendix A, Page 11 of 13 of the original FESOP for detailed calculations). The source will comply with this rule by using No. 2 distillate oil with a

sulfur content of 0.49% or less in the dryer. The sulfur dioxide emissions from the 96.0 MMBtu/hr dryer burning re-refined waste oil shall be limited to 1.6 lb/MMBtu/hr heat input. This equates to a fuel oil sulfur content limit of 1.31%. Therefore, the sulfur content of the fuel must be less than or equal to 1.31% in order to comply with this rule (See Appendix A, Page 11 of 13 of the original FESOP for detailed calculations). The source will comply with this rule by using re-refined waste oil with a sulfur content of 0.75%.

Compliance Requirements

Permits issued under 326 IAC 2-7are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

Some of the compliance monitoring requirements applicable to this source have changed. The monitoring requirements for the control have been revised as a result of replacing the wet scrubber with a jet pulse baghouse. Additionally, changes have been made to the fuel usage limits because the new dryer burner has different emission factors that the existing burner it replaces. The revised applicable compliance monitoring requirements are as follows:

1. The combustion of re-refined waste oil and No. 2 distillate fuel oil has applicable compliance monitoring conditions as specified below:

    (a) the consumption of re-refined waste oil and its equivalents for the entire source must be limited to 1,667,830 U.S. gallons per year, based on a maximum sulfur content of 0.75% for re-refined waste oil and a maximum sulfur content of 0.486% for No. 2 distillate fuel oil, in order to ensure compliance with 326 IAC 2-8 (FESOP).

    (b) Quarterly reports shall be submitted to OAM. These reports shall include:

        (1) the monthly usages of re-refined waste oil and No. 2 distillate fuel oil expressed as re-refined waste oil equivalents in gallons for SO_2 emissions; and

        (2) sulfur content and heating value of the fuel oils.

These monitoring conditions are necessary because SO_2 emissions from the combustion of re-refined waste oil and No. 2 fuel oil must be limited to below the Title V major source level of 100 tons per year. Additionally, the sulfur content of the fuel oils must comply with 326 IAC 7-1.1. The source must demonstrate compliance with the FESOP limit and also with limits established in 326 IAC 2-8-4 and 326 IAC 7-1.1.

Conclusion

The operation of this new equipment shall be subject to the conditions of the attached proposed **Administrative Amendment No. 145-14361-03230**.

Appendix A: Emission Calculations 5th Adm. Amend. 145-14361 Plant I D 145-03230

Company Name: Milestone Contractors, L.P.
Plant Location: 201 E. Rampart St., Shelbyville, Indiana 46176
County: Shelby
Date Application Received: May 14, 2001
Permit Reviewer: Aida De Guzman

Existing 109 mmBtu/hr aggregate dryer burner
As previously determined in FESOP 145-5759-03230, issued on Dec. 11, 1996.

The following calculations determine the amount of emissions created by natural gas combustion, from the aggregate dryer burner, based on 8,760 hours of operation and US EPA's AP-42, 5th Edition, Section 1.4 - Natural Gas Combustion, Tables 1.4-1, 1.4-2, and 1.4-3.

Criteria Pollutant: 109 MMBtu/hr * 8,760 hr/yr * Ef (lb/MMcf) = (ton/yr)
1000 Btu/cf * 2,000 lb/ton

P M:	5.0 lb/MMcf =	**2.39**	**ton/yr**
P M-10:	5.0 lb/MMcf =	**2.39**	**ton/yr**
S O 2:	0.6 lb/MMcf =	**0.29**	**ton/yr**
N O x:	550.0 lb/MMcf =	**262.58**	**ton/yr**
V O C:	1.4 lb/MMcf =	**0.67**	**ton/yr**
C O:	40.0 lb/MMcf =	**19.10**	**ton/yr**

The following calculations determine the amount of emissions created by the combustion of #2 distillate fuel oil @ 0.49 % sulfur, from the aggregate dryer burner, based on 8,760 hours of use and US EPA's AP-42, 5th Edition, Section 1.3 - Fuel Oil Combustion, Tables 1.3-2, 1.3-4, and 1.3-7.

Criteria Pollutant: 109 MMBtu/hr * 8,760 hr/yr * Ef (lb/1,000 gal) = (ton/yr)
140,000 Btu/gal * 2,000 lb/ton

P M:	2.0 lb/1000 gal =	**6.82**	**ton/yr**
P M-10:	1.0 lb/1000 gal =	**3.41**	**ton/yr**
S O 2:	69.0 lb/1000 gal =	**235.34**	**ton/yr**
N O x:	20.0 lb/1000 gal =	**68.20**	**ton/yr**
V O C:	0.20 lb/1000 gal =	**0.68**	**ton/yr**
C O:	5.0 lb/1000 gal =	**17.05**	**ton/yr**

The following calculations determine the amount of emissions created by re-refined waste oil @ 0.75 % sulfur, 0.947 % ash, based on 8,760 hours of use and US EPA's AP-42, 5th Edition, Section 1.11 - Waste Oil Combustion, Tables 1.11-1, 1.11-2, and 1.11-3.

Criteria Pollutant: 109 MMBtu/hr * 8760 hr/yr * Ef (lb/1000 gal) = (ton/yr)
120,000 Btu/gal * 2000 lb/ton

P M:	57.8 lb/1000 gal =	**229.83**	**ton/yr**
P M-10:	48.3 lb/1000 gal =	**192.15**	**ton/yr**
S O 2:	110.3 lb/1000 gal =	**438.63**	**ton/yr**
N O x:	19.0 lb/1000 gal =	**75.59**	**ton/yr**
V O C:	1.0 lb/1000 gal =	**3.98**	**ton/yr**
C O:	5.0 lb/1000 gal =	**19.89**	**ton/yr**

The maximum potential emissions from the existing aggregate dryer burner due to fuel combustion are the following:

		Worst Case Fuel
P M:	**229.83 ton/yr**	Re-refined Waste Oil
P M-10:	**192.15 ton/yr**	Re-refined Waste Oil
S O 2:	**438.63 ton/yr**	Re-refined Waste Oil
N O x:	**262.58 ton/yr**	Natural Gas
V O C:	**3.98 ton/yr**	Re-refined Waste Oil
C O:	**19.89 ton/yr**	Re-refined Waste Oil

Replacement 96 mmBtu/hr aggregate dryer burner

The following calculations determine the amount of emissions created by natural gas combustion, from the aggregate dryer burner, based on 8,760 hours of operation and US EPA's AP-42, 5th Edition, Section 1.4 - Natural Gas Combustion, Tables 1.4-1, 1.4-2, and 1.4-3.

Criteria Pollutant: 96 MMBtu/hr * 8,760 hr/yr * Ef (lb/MMcf) = (ton/yr)
1000 Btu/cf * 2,000 lb/ton

				Potential Fuel Usage
P M:	1.9 lb/MMcf =	**0.80 ton/yr**		840.96 MMCF
P M-10:	5.7 lb/MMcf =	**2.40 ton/yr**		
S O 2:	0.6 lb/MMcf =	**0.25 ton/yr**		
N O x:	100.0 lb/MMcf =	**42.05 ton/yr**		
V O C:	5.5 lb/MMcf =	**2.31 ton/yr**		
C O:	84.0 lb/MMcf =	**35.32 ton/yr**		

The following calculations determine the amount of emissions created by the combustion of #2 distillate fuel oil @ 0.49 % sulfur, from the aggregate dryer burner, based on 8,760 hours of use and US EPA's AP-42, 5th Edition, Section 1.3 - Fuel Oil Combustion, Tables 1.3-2, 1.3-4, and 1.3-7.

Criteria Pollutant: 96 MMBtu/hr * 8,760 hr/yr * Ef (lb/1,000 gal) = (ton/yr)
140,000 Btu/gal * 2,000 lb/ton

				Potential Fuel Usage
P M:	2.0 lb/1000 gal =	**6.01 ton/yr**		6006.86 kgal
P M-10:	1.0 lb/1000 gal =	**3.00 ton/yr**		
S O 2:	69.0 lb/1000 gal =	**207.27 ton/yr**		
N O x:	20.0 lb/1000 gal =	**60.07 ton/yr**		
V O C:	0.34 lb/1000 gal =	**1.02 ton/yr**		
C O:	5.0 lb/1000 gal =	**15.02 ton/yr**		

The following calculations determine the amount of emissions created by re-refined waste oil @ 0.75 % sulfur, 0.947 % ash, based on 8,760 hours of use and US EPA's AP-42, 5th Edition, Section 1.11 - Waste Oil Combustion, Tables 1.11-1, 1.11-2, and 1.11-3.

Criteria Pollutant: 96 MMBtu/hr * 8760 hr/yr * Ef (lb/1000 gal) = (ton/yr)
120,000 Btu/gal * 2000 lb/ton

				Potential Fuel Usage
P M:	60.6 lb/1000 gal =	**212.37 ton/yr**		7008.00 kgal
P M-10:	48.3 lb/1000 gal =	**169.23 ton/yr**		
S O 2:	110.3 lb/1000 gal =	**386.32 ton/yr**		
N O x:	19.0 lb/1000 gal =	**66.58 ton/yr**		
V O C:	1.0 lb/1000 gal =	**3.50 ton/yr**		
C O:	5.0 lb/1000 gal =	**17.52 ton/yr**		

The maximum potential emissions from the replacement aggregate dryer burner due to fuel combustion are the following:

		Worst Case Fuel
P M:	**212.37 ton/yr**	Re-refined Waste Oil
P M-10:	**169.23 ton/yr**	Re-refined Waste Oil
S O 2:	**386.32 ton/yr**	Re-refined Waste Oil
N O x:	**66.58 ton/yr**	Re-refined Waste Oil
V O C:	**3.50 ton/yr**	Re-refined Waste Oil
C O:	**17.52 ton/yr**	Re-refined Waste Oil

Summary of Unlimited Potential Emissions change associated with burner replacement:

Pollutant	Existing 109 MMBtu/hr burner, worst case emissions (ton/yr)	New 96 MMBtu/hr burner, worst case emissions (ton/yr)	Change due to replacement (ton/yr) [new minus existing]
P M:	229.83	212.37	-17.46
P M-10:	192.15	169.23	-22.92
S O 2:	438.63	386.32	-52.31
N O x:	262.58	66.58	-196.01
V O C:	3.98	3.50	-0.47
C O:	19.89	17.52	-2.37

Revised Fuel Usage limitations based on replacement 85 MMBtu/hr burner

Primary Fuel Usage Limitations

Fuel Oil: re-refined waste oil

$$\frac{91.94 \text{ tons SO2/year limited}}{386.32 \text{ tons SO2/year potential}} * 7008.00 \frac{\text{Kgals}}{\text{year potential}} = 1667.83 \frac{\text{Kgals}}{\text{year limited}}$$

Primary fuel equivalence limit for #2 distillate fuel oil based on SO2 emissions from re-refined waste oil

$$\frac{207.27 \text{ \#2 F.O. potential emissions (ton/yr)}}{6006.86 \text{ \#2 F.O. potential usage (kgal/yr)}} / \frac{386.32 \text{ W.O. potential emissions (ton/yr)}}{7008.00 \text{ W.O. potential usage (kgal/yr)}}$$

$$= 0.6260 \frac{\text{Kgal W.O. burned}}{\text{Kgal \#2 F.O. burned}}$$

***** TOTAL LIMITED COMBUSTION EMISSIONS for Replacement Burner *****

Based on SO2 limit of 91.94 tons/year, the re-refined waste oil combustion emissions are scaled down as follows:

Pollutant	Emissions from limited Fuel Oil & Re-refined W.O. [1]	Emissions from unlimited Natural Gas	Total possible emissions from both fuels
P M:	50.54	0.80	51.34
P M-10:	40.28	2.40	42.68
S O 2:	91.94	0.25	92.19
N O x:	15.84	42.05	57.89
V O C:	0.83	2.31	3.14
C O:	4.17	35.32	39.49

"Methodology: SO2 limit, tons/yr / pot'l SO2 emissions, tons/yr * pollutant pot'l emissions, tons/yr